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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,780	09/17/2003	Tien-Rong Lu	LUTI3003D/REF	2962

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BACON & THOMAS, PLLC  
625 SLATERS LANE  
FOURTH FLOOR  
ALEXANDRIA, VA 22314

EXAMINER

MCPHERSON, JOHN A

ART UNIT

PAPER NUMBER

1756

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

LD

<b>Office Action Summary</b>	<b>Application No.</b> 10/663,780	<b>Applicant(s)</b> LU, TIEN-RONG	
	<b>Examiner</b> John A. McPherson	<b>Art Unit</b> 1756	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 22-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/8/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is responsive to the Amendment filed 11/8/04.
2. The Amendment filed 11/8/04 successfully overcomes the objection and rejections set forth in paragraphs 2-4 of the Office Action mailed 7/7/04. Accordingly, the objection and rejections are withdrawn.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-12 and 22-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The presently claimed invention, as amended, requires utilizing insulating light-absorbing pigments or dyes (see claim 1, lines 6-7; claim 22, lines 1-2; claim 23, lines 1-2; claim 24, line 1; and claim 25, line 1), however this limitation is not present in the original disclosure. Page 12, lines 7-11 of the specification states that the light absorbing pigments of dyes of the present invention can be any conventional light

absorbing pigments or dyes, however there is no teaching that the light absorbing pigments or dyes must be, or preferably are, insulating. Applicant cites the top of page 3 of the specification as providing support for this new limitation, however this section a) describes the prior art, not the present invention; b) refers to an insulation layer made of photoresist, which is not a part of the present invention; and c) does not teach the presence of any light absorbing pigment or dye in the layer, insulating or otherwise.

Therefore, it is the position of the Examiner that the limitation --insulating--, as applied to the light absorbing pigment and dyes utilized in the present invention, introduces new matter.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,037,712 (US '712) [cited in the Information Disclosure Statement filed 9/17/03] in view of JP 11-273870 (JP '870), further in view of US 5,780,201 (US '201).

US '712 discloses a method of producing an organic electroluminescent display device comprising the steps of forming first electrodes on a substrate, and forming insulating films on the first electrodes except at regions corresponding to light emitting portions (see the abstract), wherein the step of forming the insulating films comprising

Art Unit: 1756

the steps of applying a non-photosensitive polyimide, prebaking the polyimide, applying a positive resist, patterning the positive resist, removing sequentially exposed portions of the resist and corresponding portions of the polyimide film, and curing the polyimide insulating films at about 350 C. See column 7, lines 16-36. However, US '712 does not disclose adding insulating light-absorbing pigments or dyes to the polyimide.

JP '870 discloses a method of making an organic EL element comprising the steps of blacking an insulating layer by adding carbon black to polyimide resin, so as to improve the contrast ratio and visibility. See the abstract. US '201 discloses a method of making an organic black matrix for display applications comprising the steps of combining polyimide/dye solutions with mixed metal oxide pigment dispersions, so as to negate the need for utilizing low resistivity carbon black. See the abstract; column 3, lines 54-62; column 5, lines 20-30.

It would have been obvious to one skilled in the requisite art to add a dye and a mixed metal oxide pigment dispersion to polyimide resin, as taught by US '210, when blackening the insulating layer of an organic EL element, as taught by JP '870, in the process of US '712 because it is taught that blacking the insulating layer improves the contrast ratio and visibility by reducing the reflection of external light from non-luminous parts of an electrode, and it is taught that utilizing a mixture of dyes and pigment dispersions as the black material negates the need to use low resistivity carbon black, which can result in crosstalk if the black layers are too conductive.


***Response to Arguments***

5. Applicant's arguments with respect to claims 1-12 and 22-25 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. McPherson whose telephone number is (571) 272-1386. The examiner can normally be reached on Monday through Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John A. McPherson  
Primary Examiner  
Art Unit 1756